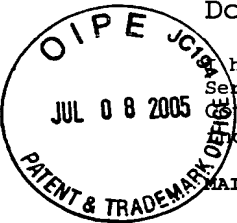


AF *mm*

Docket No.: A-2899



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MAIL STOP: APPEAL BRIEF-PATENTS

By:

*Honghong Chen*

Date: July 6, 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences

Applic. No. : 09/923,696 Confirmation No.: 1563  
Inventor : Martin Gutfleisch, et al.  
Filed : August 6, 2001  
Title : Method and Device for Clearing a Re-  
Imageable Printing Form  
TC/A.U. : 2854  
Examiner : Anthony H. Nguyen  
Customer No. : 24131

Hon. Commissioner for Patents  
Alexandria, VA 22313-1450

SUBSTITUTE BRIEF ON APPEAL

S i r :

In response to the *Notification of Non-Compliance Appeal Brief* dated June 30, 2005, Appellants submit this *Substitute Brief on Appeal*, which replaces the *Brief on Appeal* dated April 7, 2005.

This is an appeal from the final rejection in the Office action dated October 4, 2004, finally rejecting claims 1-26.

Appellants submit this *Substitute Brief on Appeal* in triplicate. The payment in the amount of \$500.00 to cover the fee for filing the *Brief on Appeal* has been made together with the *Brief on Appeal* dated April 7, 2005.

Real Party in Interest:

This application is assigned to Heidelberger Druckmaschinen AG of Heidelberg, Germany. The assignment was recorded on May 19, 2003, under Reel 014085, Frame 0714.

Related Appeals and Interferences:

No related appeals or interference proceedings are currently pending which would directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

Status of Claims:

Claims 1-26 are rejected and are under appeal. No claims were cancelled.

Status of Amendments:

No claims were amended after the final Office action. A *Response under 37 CFR § 1.116* was filed on January 5, 2005. The Primary Examiner stated in an *Advisory Action* dated January 27, 2005, that the request for reconsideration had been considered but did not place the application in condition for allowance. A Notice of Appeal with the appropriate extension fee was filed on February 7, 2005.

Summary of the Claimed Subject Matter:

The invention of the instant application relates to a method for clearing a re-imageable printing form (see page 1, lines 7-8 of the specification), which includes the step of treating the printing form with a fluid (liquid or gaseous) clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form (see, for example, page 13, line 16, page 19, line 25, page 20, line 11, and page 22, line 6, of the specification). As described page 19, lines 9-10 of the specification, the method may also include a step ("cleaning the printing form of ink" as recited in claim 2) in which the ink is initially washed from the printing form.

The invention of the instant application also relates to a device for clearing a re-imageable printing form or a printing machine having a device for clearing a re-imageable printing form.

References Cited:

|           |                 |                   |
|-----------|-----------------|-------------------|
| 5,317,970 | Nüssel, et al.  | June 7, 1994      |
| 5,644,986 | Gydesen         | July 8, 1997      |
| 6,082,263 | Koguchi, et al. | July 4, 2000      |
| 6,148,728 | Shin, et al.    | November 21, 2000 |

Grounds of Rejection to be Reviewed on Appeal

1. Whether or not claims 1-3, 6, 9, 16-18, 21, and 26 are anticipated by Koguchi et al. under 35 U.S.C. §102(b).
2. Whether or not claims 4 and 19 are obvious over Koguchi et al. in view of Nüssel et al. under 35 U.S.C. §103(a).
3. Whether or not claims 5, 15, 20, and 25 are obvious over Koguchi et al. in view of Gydesen under 35 U.S.C. §103(a).
4. Whether or not claim 13 is obvious over Koguchi et al. in view of Nüssel et al. and further in view of Shin et al. under 35 U.S.C. §103(a).
5. Whether or not claims 7-8, 10-12, 14, and 22-24 are obvious over Koguchi et al. under 35 U.S.C. §103(a).

Grouping of Claims:

Claims 1-4, 16-17, and 26 are independent. Claims 5-12 and 14-15 depend on claim 1. Claim 13 depends on claim 4. Claims 18-25 depend on claim 16. The patentability of claims 5-15, 18, and 20-25 is not separately argued. Therefore, claims 5-15, 18, and 20-25 stand or fall with claim claims 1, 4, and 16. The patentability of claim 19 is separately argued. Therefore, claim 19 does not stand or fall with claim 16. Claims 2-3, 16-17, and 26 are argued with similar reasons as

claim 1 and, therefore, stand or fall with claim 1. Claim 4 does not stand or fall with claim 1.

Argument:

Whether or not claims 1-3, 6, 9, 16-18, 21, and 26 are anticipated by Koguchi et al. under 35 U.S.C. §102(b).

In the second paragraph on page 2 of the above-mentioned Office action, claims 1-3, 6, 9, 16-18, 21, and 26 have been rejected as being anticipated by Koguchi et al. under 35 U.S.C. § 102(b).

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claims 1-2 call for, inter alia:

treating the printing form with a fluid clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

Claim 3 calls for, inter alia:

treating the printing form with a liquid clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

Claims 16-17 and 26 call for, inter alia:

a device for applying fluid clearing medium to the printing form in a non-abrasive manner, irreversibly

clearing all image information on a surface of the printing form.

The Examiner has referred to column 4, lines 57-61 of Koguchi et al. as teaching a method and a device for clearing a re-imageable printing form with a fluid clearing medium in a non-abrasive manner, irreversibly clearing all image information on the surface of a printing form (see the third paragraph on page 2 of the Office action). However, Koguchi et al. teach in column 4, lines 57-61 only the irreversible clearing of image information of the printing plate (restoring to the state where it bears thereon no image) by exposure of the printing plate to active light after being cleaned of ink. In fact, Koguchi et al. teach two different and separate steps of treating a printing plate. First, the ink but not the image information of a printing plate is cleared at an ink washing station 17 which is done by washing out ink adhering to the printing plate by the use of a hydrophobic petroleum solvent (a liquid) (see column 12, lines 44-47). However, this step of clearing does not clear all image information on the surface of the printing form but only clears ink adhering to the surface of the printing plate. Second, the printing plate is restored by the use of active light, namely the image information is erased. However, Koguchi et al. only teach the use of active light, but not the use of fluid (liquid or

gaseous) clearing medium, as recited in the claims of the instant application, to erase the image information.

Applicants would like to clarify the terms "clearing" and "cleaning" in order to avoid any confusion. In the instant application, "clearing" means erasing the image information and brining the printing plate back into a neutral state (if ink is again applied, no image can be seen); "cleaning" means washing off the ink but the image information is still on the printing plate (one can make the information visible by applying ink again). In Koguchi et al., "clearing" means washing off ink whereas "restoring" means erasing the image information.

Since the Koguchi et al. reference teaches the use of active light for the step of "restoring" ("clearing" in the instant application), it is not a relevant prior art reference in view of the claims of the instant application, which are limited to a fluid (liquid or gaseous) clearing medium.

The Examiner has stated in the first paragraph on page 5 of the Office action that the "image information on a surface of a printing plate is inherently irreversible after end of printing." This statement is incorrect and conflicts with the Examiner's statement in the third paragraph on page 2 of the

Office action. As can be clearly seen from column 4, lines 51-61 of Koguchi et al., as well as document EP 0 911 155 A1 (which is the parallel EP application to US 6,082,263 - Koguchi et al. - cited by the Examiner and which is mentioned on page 3 of the specification of the instant application), the printing plate can be irreversibly cleared of image information. EP 0 911 155 A1 teaches irreversible clearing of image information by the surface-wide exposure of UV light.

Claims 1-3, 16-17, and 26 are, therefore, believed to be patentable over Koguchi et al. and since claims 6, 9, 18, and 21 are ultimately dependent on claims 1 or 16, they are believed to be patentable as well.

**Whether or not claims 4 and 19 are obvious over Koguchi et al. in view of Nüssel et al. under 35 U.S.C. §103(a).**

In the penultimate paragraph on page 2 of the above-mentioned Office action, claims 4 and 19 have been rejected as being unpatentable over Koguchi et al. in view of Nüssel et al. under 35 U.S.C. § 103(a).

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.



Claim 4 calls for, inter alia:

treating the printing form with a gaseous clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

The Examiner has stated in the paragraph bridging pages 2 and 3 of the above-mentioned Office action that Koguchi et al. do not teach the use of a gaseous clearing medium for treating the printing form. However, the Examiner has further stated that Nüssel et al. teach the use of a gaseous clearing medium for treating the printing form (column 2, the second paragraph) and it would have been obvious to one of ordinary skill in the art to modify the method of Koguchi et al. by using the gaseous clearing medium for treating the printing form as taught by Nüssel et al. for uniformly treating the printing form.

Nüssel et al. teach the use of plasma (ionized reactive gas) to remove particles (see abstract). However, the claims of the instant application are limited to "a non-abrasive manner." No particles are removed in the invention of the instant application. Therefore, the Nüssel et al. reference is also irrelevant.

"Abrasion" means wearing down by friction, e.g. under the action of hard particles (see e.g. <http://www.websters-online->

[dictionary.org/definition/english/ab/abrasion.html](http://dictionary.org/definition/english/ab/abrasion.html)). Nüssel et al. teach the removal of particles, i.e. the abrasion of particles under the action of the plasma particles. The invention of the instant application teaches clearing without removing particles. The image information in the invention of the instant application is changed and restored (cleared) by chemical action of the liquid or gas used so that atoms or molecules are replaced but no particles (much larger than molecules) are removed (definition of "particle" see, e.g., <http://www.websters-online-dictionary.org/definition/english/ab/particle.html>).

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of Claims 4 and 19. Claims 4 and 19 are, therefore, believed to be patentable over the art. Claim 19 is also believed to be patentable because it depends on claim 16, which is believed to be patentable as discussed above.

**Whether or not claims 5, 15, 20, and 25 are obvious over Koguchi et al. in view of Gydesen under 35 U.S.C. §103(a).**

In the second paragraph on page 3 of the above-mentioned Office action, claims 5, 15, 20, and 25 have been rejected as

being unpatentable over Koguchi et al. in view of Gydesen under 35 U.S.C. § 103(a).

As discussed above, claims 1 and 16 are believed to be patentable over the art. Since claims 5, 15, 20, and 25 are dependent on claims 1 and 16, respectively, they are believed to be patentable as well.

**Whether or not claim 13 is obvious over Koguchi et al. in view of Nüssel et al. and further in view of Shin et al. under 35 U.S.C. §103(a).**

In the penultimate paragraph on page 3 of the above-mentioned Office action, claim 13 has been rejected as being unpatentable over Koguchi et al. in view of Nüssel et al. and further in view of Shin et al. under 35 U.S.C. § 103(a).

As discussed above, claim 4 is believed to be patentable over the art. Since claim 13 is dependent on claim 4, it is believed to be patentable as well.

**Whether or not claims 7-8, 10-12, 14, and 22-24 are obvious over Koguchi et al. under 35 U.S.C. §103(a).**

In the second paragraph on page 3 of the above-mentioned Office action, claims 7-8, 10-12, 14, and 22-24 have been

rejected as being unpatentable over Koguchi et al. under 35  
U.S.C. § 103(a).

As discussed above, claims 1 and 16 are believed to be  
patentable over the art. Since claims 7-8, 10-12, 14, and 22-  
24 are dependent on claims 1 and 16, respectively, they are  
believed to be patentable as well.

In view of the foregoing, the honorable Board is therefore  
respectfully urged to reverse the final rejection of the  
Primary Examiner.

Respectfully submitted,

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YC/bb

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Claims Appendix:



1. A method for clearing a re-imageable printing form, which comprises treating the printing form with a fluid clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

2. A method for clearing a re-imageable printing form, which comprises cleaning the printing form of ink, and treating the cleaned printing form with a fluid clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

3. A method for clearing a re-imageable printing form, which comprises treating the printing form with a liquid clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

4. A method for clearing a re-imageable printing form, which comprises treating the printing form with a gaseous clearing medium in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

5. The method according to claim 1, which includes treating the printing form with ultrasound during the treatment thereof with the fluid clearing medium.

6. The method according to claim 1, which includes exposing the printing form to the effects of a heat source during the treatment thereof with the fluid clearing medium.

7. The method according to claim 6, which includes providing at least one of an infrared laser, at least one heat emitter and at least one hot-air blower as the heat source.

8. The method according to claim 6, which includes exposing the printing form to higher than normal atmospheric pressure during the treatment with the fluid clearing medium.

9. The method according to claim 5, which includes providing water as the fluid clearing medium.

10. The method according to claim 1, which includes providing acid as the fluid clearing medium.

11. The method according to claim 1, which includes providing an alkali or a base as the fluid clearing medium.

12. The method according to claim 1, which includes applying the fluid clearing medium to the printing form from at least one sprayer.

13. The method according to claim 4, which includes removing the printing form from the influence of light during the treatment with the gaseous clearing medium.

14. The method according to claim 10, which includes providing oxygen as the gaseous clearing medium.

15. The method according to claim 1, which includes performing the steps thereof in one of a printing machine and a clearing device outside a printing machine.

16. A device for clearing a re-imageable printing form, comprising a device for applying fluid clearing medium to the printing form in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

17. A device for clearing a re-imageable printing form washed free of ink, comprising a device for applying fluid clearing medium to the ink-free printing form in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

18. The device for clearing a re-imageable printing form according to claim 16, wherein said device for applying fluid

clearing medium serves for applying liquid clearing medium to the printing form.

19. The device for clearing a re-imageable printing form, according to claim 16, wherein said device for applying fluid clearing medium serves for applying gaseous clearing medium to the printing form.

20. The device for clearing a printing form according to claim 16, including an ultrasound source for irradiating the printing form with ultrasound.

21. The device for clearing a printing form according to claim 16, including a heat source for heating the printing form.

22. The device for clearing a printing form according to claim 21, wherein said heat source is at least one of an infra-red laser, at least one heat emitter, and at least one hot-air blower.

23. The device for clearing a printing form according to claim 21, including a device for generating higher than normal atmospheric pressure in the environment of the printing form.



24. The device for clearing a printing form according to claim 16, wherein said device for applying fluid clearing medium to the printing form is a sprayer.

25. The device for clearing a printing form according to claim 16, including a device for partitioning the printing form against effects of light.

26. A printing machine having a device for clearing a re-imageable printing form, comprising a device for applying fluid clearing medium to the printing form in a non-abrasive manner, irreversibly clearing all image information on a surface of the printing form.

Evidence Appendix:

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or any other evidence has been entered by the Examiner and relied upon by appellant in the appeal.

Related Proceedings Appendix:

Since there are no prior or pending appeals, interferences or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal, no copies of decisions rendered by a court or the Board are available.